

Appendix 7: FTMS

Financial Trend Monitoring System Indicators

When managing municipal finances, it is important to understand past financial trends and their effects on the present and future. To accomplish this, Metro has developed a Financial Trend Monitoring System (FTMS). This system is based on the FTMS developed and outlined by the International City/County Management Association (ICMA) in its *Evaluating Financial Condition – A Handbook for Local Governments*, but slightly modified to meet the needs of Metropolitan Nashville and Davidson County.

The trend system consists of measurable factors that reflect and influence Metro's financial condition – its ability to finance current services on a continuing basis. These factors include the national economy, population levels, federal and state mandates, the local business climate, and the internal fiscal policies of the local government.

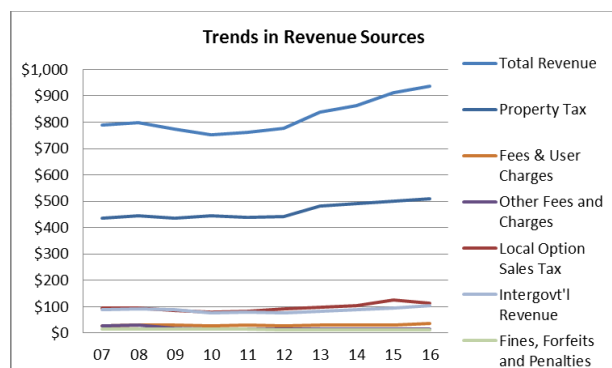
This evaluation reviews financial data from the general funds of the General Services District (GSD) and the Urban Services District (USD) for the ten-year time period extending from FY2007 to FY2016.

Revenue Indicators

The revenue indicators reflect Metro's ability to produce sufficient revenue to support current service levels, meet existing obligations, and plan for future initiatives.

Trends in Revenue Sources

Description: This graph reveals trends for the largest sources of revenue received by Metro, grouped into six categories: total revenue, property taxes, sales taxes, fees & user charges, revenue from other governments, and other revenue. The composition of these revenues helps determine the Metropolitan Government's potential dependence on any one specific revenue source in order to respond to changing economic situations and service demands.



Commentary: Total revenue grew by approximately 18.8% between FY2007 and FY2016, which represents a net increase of 1.1% relative to the previous rolling ten-year period. This increase is attributed to strong growth in property tax revenue over the same period, which netted a 4.5% gain. During this time period, two basic trends are evident.

Metro experienced vastly different revenue growth patterns during separate five-year periods ranging from 2007 to 2016. The devastating effects of the financial and liquidity crises, which occurred from 2007 to 2008 and eventually led to the subprime mortgage crisis, sending the country into a period now referred to as The Great Recession, are evident as total revenue declined 3.7% from 2007 to 2011. This figure rebounded to a much healthier increase of 20.6% between 2012 and 2016, as the economy recovered on a local, national, and even global scale.

The predominant source of revenue is property taxes, which increased by approximately 14.7% between 2012 and 2016. This upward trend occurred, in-part, following an increase in property tax rates in FY2013. A reappraisal that same calendar year lowered the rate for the following fiscal year, where it has remained since, despite continued growth. This demonstrates that Metro is benefitting from economic activity that is in turn driving new construction and property value appreciation. The growth experienced over the last five years is exceeded by that of the last ten, at 17.0%; various economic indicators, to include population growth, job market expansion, and unmet demand due to low supply, suggest a continuation of this trend for the upcoming fiscal year.

The tax base has grown moderately but consistently over the period. Assessments have increased with the market and accounted for with periodic reappraisals, with the next slated for FY2017. State law mandates that revenues tied to the reappraisal of existing property remain the same, irrespective of increases in property values. This is achieved by offsetting reductions in the certified tax rates, ensuring that the reappraisal serves its intended purpose, equalization based on current market value. This revenue neutrality requirement creates stability in the source, which is beneficial given its proportion relative to the overall budget. The rate increases are detailed in the property tax discussion in Section A of this book.

Intergovernmental revenues (funds received from other governments) decreased by 10.7% from FY2007 to FY2011. In the years that followed, relative to revenues from all other sources, year over year figures continued to decline until about 2013, as absolute annual dollar amounts remained flat. Since then, there has been a slight uptick over the last couple of years, which could be attributed to an improving economy as well as an increase in programs funded by the State and/or Federal government. Due to the recession, Metro has taken steps to ensure that it is not overly dependent on revenues from other governmental entities due to the volatility of available funds. These steps include programs being reduced or curtailed in some situations.

Local option sales tax is the primary source of elastic revenue because it responds to changes in inflation and the economic base. The total sales tax rate in Davidson County is 9.25%. In FY2002, a 1.0% increase to all items except unprepared foods put the state portion of the sales tax rate at 7.0%, plus the 2.25% local option rate levied by Davidson County. During the 10-year period being discussed, Davidson County has experienced a 19.3% increase in the local option sales tax. The impact of the recession is readily identifiable from 2007 through 2011 as Metro witnessed a decrease of 13.8%.

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By comparison, from 2012 through 2016 this revenue source grew 23.4%.

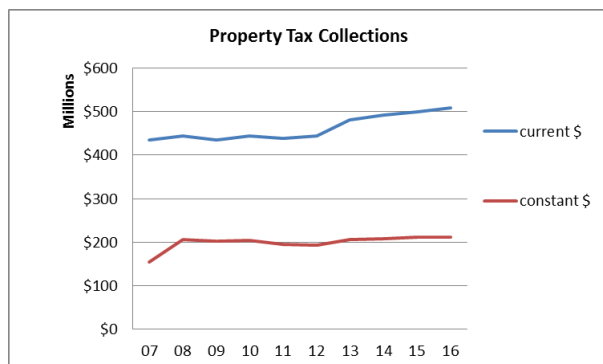
Overall, fees and user charge collections have increased approximately 29.7% between FY2007 and FY2016, however, categorically they account for a small portion of total revenue.

Analysis: There are several suggestive trends indicating a significantly decreased reliance on certain revenue streams; although intergovernmental revenue is trending slightly upward in absolute terms, in relative terms it has declined or shown minimal growth in proportion to total revenue over the last five years. Fees and user charges and local option sales tax revenue have both shown typical post-recession growth, the result of increased consumer confidence and discretionary income; with the former increasing by roughly 14% year over year, the largest for the category during the ten year period. However, per the status quo, potential threats to the viability of certain revenue sources going forward still remain; the result of inherent ties to the state and national economy in general, policy and administration changes at all three levels, as well as uncertainty with respect to the stability of revenues reliant on the tourism industry in particular. Examining avenues for increased diversification of Metro's revenue streams would help to offset potential sluggish performance in certain revenue categories at some point in the future.

However, since 2010 as economic indicators, including GDP, have reflected stabilization, if not growth, in the national economy, Nashville too has followed suit.

Property Tax

Description: Metro relies heavily on the property tax as its single largest revenue source. In FY2016, the property tax constituted approximately 54% of all revenue collected by Nashville Metropolitan Government.

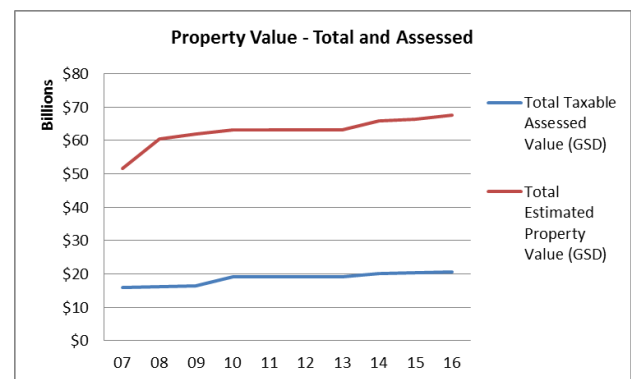


Commentary: The property tax, a comparatively stable funding source, should mirror the effects of inflation to ensure that dollars collected have consistent buying power year to year. For the analysis period, the current buying power of the property tax revenue has varied from a low of \$434M in FY2007 to a high of \$508M in FY2016. Since FY2011, as the total revenue generated has increased by roughly \$65M, constant buying power has failed to keep pace, increasing only \$18.7M.

Analysis: The graph displays property tax revenue in both current and constant dollars to show the effect of inflation on revenue. The noticeable uptick in FY2013 can be attributed to two things; a rate increase for the first time since FY2006, as well as a reappraisal. Although the latter resulted in a \$0.14 decrease to the adjusted tax rate for the following year, the offset created by both returned the effective rate to prerecession levels. This, in-part, demonstrated economic recovery locally and produced an increase from \$435M in FY2007 to \$508M in FY2016.

Appraised Property Value

Description: Appraised value of property measures the market value of taxable real, personal, and utility property in Metro. Ideally, market and appraised values are the same – indicated by an appraisal ratio of 1.00. When a gap exists between market and appraised values, some property owners are paying less than a fair share of property taxes while others may be overburdened with taxes on properties of declining values. Appraised values and appraisal ratios (the state-estimated ratio between appraised and market values, updated every two years) are presented in Section A of this book.



Commentary: Regular reappraisals should help keep appraised values balanced with market values. All taxable real property is appraised every four years by Metro's Assessor of Property, ensuring that there is equitable distribution across the entire tax base.

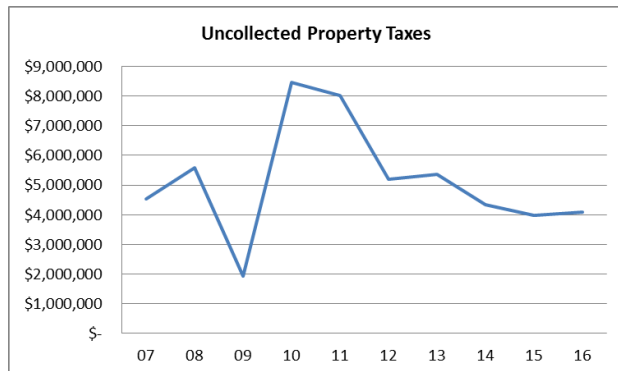
Analysis: The total assessed value of property has steadily increased from FY2007 to FY2016 by 30.5%. Over the same time period, total estimated property value mirrored that figure exactly, an ideal scenario that accomplishes two objectives; the market is being fairly and accurately represented for citizens and they also benefit in increased service offerings, the result of the precise assessment of the tax base. Metro has elected to undertake a four-year reappraisal cycle in an effort to keep property values in line with current market values as well as maintain equalization throughout the county. Appraised values are generally within 90% of market values.

Uncollected Property Taxes

Description: Each year, a portion of assessed property taxes remain uncollected due to a variety of reasons. An increase in this percentage can indicate an overall decline

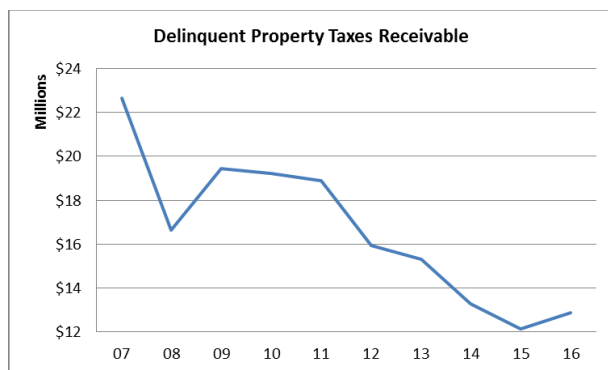
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in local government's economic health. Delinquent and back property tax collections form a significant portion of annual property tax revenue. The largest portion of delinquent taxes consists of the prior year's assessments.



Analysis: With the exception of just a few years over the last ten, uncollected property tax levels have consistently hovered between just over \$4.0M to \$5.5M, most recently at \$4.1M in FY2016. These relatively low levels can be attributed, in large part, to an FY2006 agreement in which Metro sold its outstanding property tax receivables to a private sector collector, which at the time stood at approximately \$23M.

Delinquent Property Tax Receivables



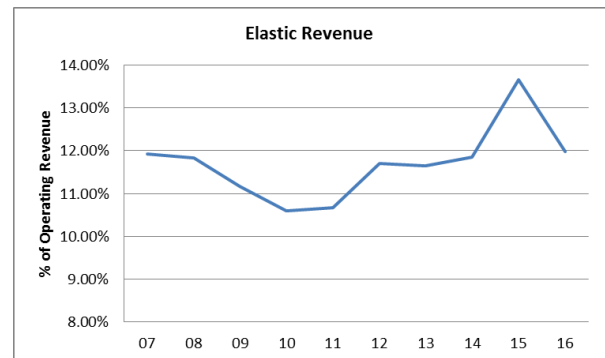
Commentary: Delinquent property tax receivables have fluctuated during the time period of analysis. These fluctuations occur as a result of property tax increases and/or periods of economic stagnation. Despite a slight year over year increase, the overall trend for delinquent property tax receivables has been negative, decreasing by 43.2% from FY2007 to FY2016.

Analysis: The fluctuations in delinquent property tax collections can be explained by inconsistencies in the collection process, with the spikes in the graph representing increased efforts by the legal department in pursuing delinquent funds as noted in the declines from FY2007 to FY2008 and since 2011 overall.

Elastic Revenue

Description: Elastic revenue refers to revenue that responds to changes or fluctuations in inflation and the

economy. In this study, the elastic revenue analyzed is the local option sales tax.



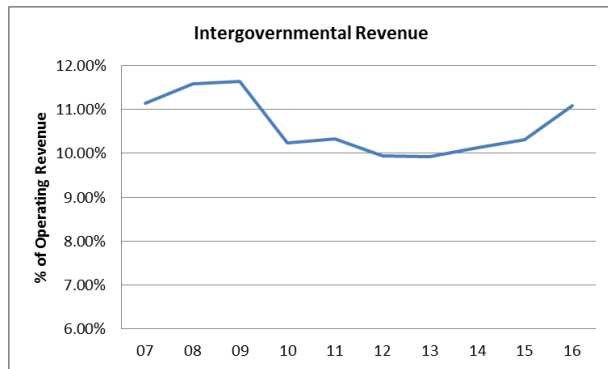
Commentary: In FY2007, elastic operating revenues were roughly \$94M. For the first five years of the period, the revenues experienced a decline of 13.8%, indicative of the recessionary period of the timeframe. However, over the second half of the ten year analysis, elastic revenues have increased by a much more robust 23.4%.

Analysis: During periods of increased inflation, a high percentage of sales tax revenue compared to total revenue helps maintain purchasing power. One should note that the FY2006 reappraisal and subsequent property tax revenue increase was a key reason that a lower percentage of total revenues were attributed to sales tax. This property tax increase, coupled with the previously referenced recessionary period, dampened local option sales taxes' percentage of overall revenue. The category's growth, which started modestly in 2011, positively correlates with the recovery and subsequent strengthening of the economy that began that year. In conjunction with this, improved efficiency in sales tax collections has also played an important role in the increase. The decrease observed in FY2016 is the result of fund allocation adjustments and not representative of the actual continued growth of the underlying source itself.

Intergovernmental Revenue

Description: Intergovernmental revenue consists of funds from federal, state, and other governmental entities, and non-profit groups. Often these funds are designated for specific uses. Too much dependence on intergovernmental revenue is risky; if funds are withdrawn, the local government may need to fill the gap or reduce services provided by the funding.

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Commentary: Intergovernmental revenue, following steady growth from FY2007 to FY2009 relative to total revenue, declined considerably in FY2010 and has remained comparatively flat since. In part, this is due to property tax rate increases, which increased the percentage of revenue raised by the property tax relative to other sources. Along with this, during several of the years being examined there were reductions in intergovernmental transfers from state and federal sources due to budget reductions at the state level and shifting of resources out of federal grant programs. These revenues have started to trend upward since FY2012, as fiscal tightening at the federal and state levels has lessened.

Analysis: From FY2007 to FY2009 a noticeable spike in intergovernmental revenue occurred, which could be attributed to an inflow of federal stimulus funds, the cumulative measures of which later became known as the American Recovery and Reinvestment Act in 2009. Since then, the category's contribution to Metro's total revenue figure has leveled off to prerecession levels and remained consistent, ranging from 9.9% to FY2016's prerecession high of 11.1%. Despite the slight upturn, intergovernmental revenues in FY2016 only modestly exceeded contributions from nearly a decade and a half ago.

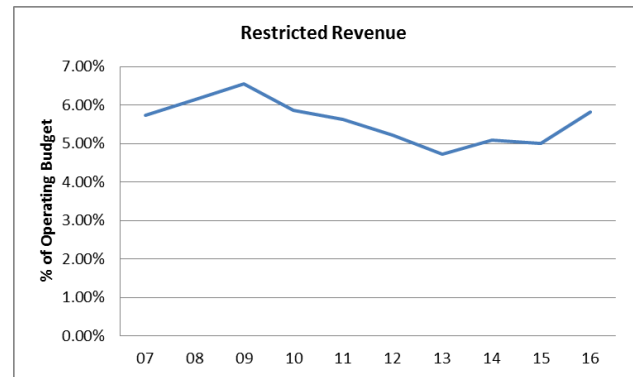
Revenue Benchmarks

Revenue benchmarks serve as important symbols of the flexibility found in spending restrictions within the Metropolitan Government. These trends may reveal implementation of cost controls or fiscal policies.

Restricted Revenue

Description: Restricted revenue is legally designated for a specific use, often spelled out in state or federal laws, bond covenants, or grant contracts. Specifically, restricted revenue includes revenue from other governments and governmental agencies, excluding the state income tax allocation and the state sales tax funds.

An increased percentage of restricted revenue as a percentage of total operating revenues can hinder the government's ability to modify spending priorities in response to changing service needs and demands.



Commentary: The restricted revenue graph closely resembles the overall trend illustrated in the intergovernmental revenue graph: the state sales tax allocation and the income tax on dividends and interest are not included in the restricted revenue calculation. Restricted revenue as a percentage of total revenue reached its lowest point for the period reviewed at 4.7% in FY2013. Since then, with the exception of FY2015, the category has increased, nearly reaching the highest it has been since FY2010 this past year. This is further evidenced by absolute growth of 34.6% over the last five years. Comparatively, the previous rolling five year period saw growth of just 7.0%. However, this growth is to be expected following the decline in intergovernmental revenue related to the fiscal crisis of 2009 and the subsequent reduction of federal grant revenue.

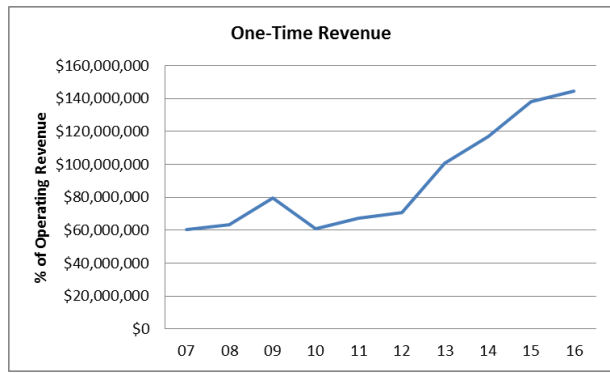
While grants do allow local governments the opportunity to expand certain programs, it is a good idea to keep the percentage relatively low so that a government does not become overly reliant on grant funding from sources that cannot be guaranteed from year to year. As a percentage of total revenues, restricted revenues have not exceeded 7.0% since FY2005.

One-Time Revenue

Description: A one-time or temporary revenue source is one that is not expected to be a continuous funding source, such as the allocation of a portion of fund balance reserves or a one-time grant.

Continual use of one-time revenue to balance the budget may indicate that the revenue base is not sufficient to support current service levels. For this study, a one-time revenue source refers to funds appropriated from fund balance. The warning trend for this indicator is an increasing use of one-time operating revenue as a percentage of net operating revenues.

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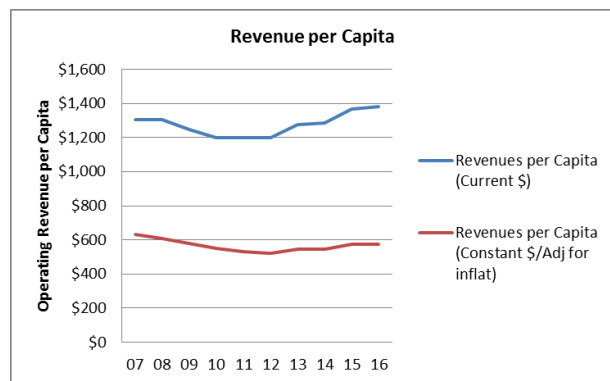


Analysis: In FY2007, \$60.5M (7.7% of net operating revenue) was contributed as one-time revenue. By FY2016 this amount had increased to \$145M, or 15.4% of net operating revenue. Use of one-time revenue has steadily increased over the period of analysis (a 100.8% increase from FY2007 to FY2016), with a sharp spike in 2009 which can be attributed to stimulus funds. The graph indicates that departments show an increased reliance on fund balance or grant funds to provide services.

Commentary: The global economic crisis in 2008 significantly impacted local revenue and required substantial commitment of fund balance to cover revenue shortfalls. The steady rise in use of one-time revenue can be attributed to a concerted effort by the Dean administration to increase contributions to Metro's 4% fund beyond required levels in order to shield Metro from another recession. As a result, surplus reserve dollars have been used to fund Metro operating capital needs. This process has been managed effectively; Metro monitors its fund balances carefully, manages its use, and avoids appropriating fund balances to fund on-going operating expenses.

Revenues per Capita

Description: This indicator assumes that services and revenues will increase proportionately with growth in the population and that the level of *per capita* revenue will stay at least constant in real terms. The population of Davidson County has grown by 12.2% since 2007.



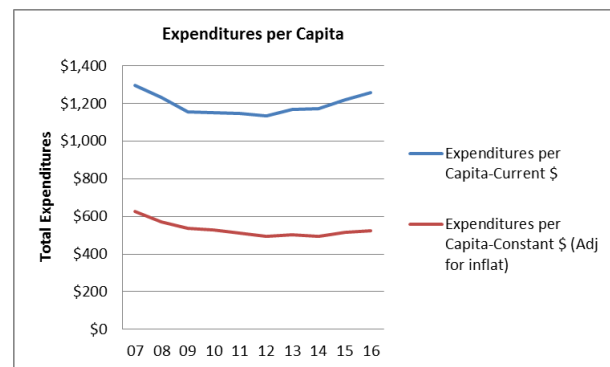
Commentary: In constant dollars, revenue per capita decreased 8.6% over the period of analysis. The effect of

the 2008 Great Recession is evident in the 15.5% decrease from FY2007 to FY2011, and the post-recession 10.2% increase from FY2012 to FY2016. Revenue per capita remained relatively flat in FY2016, as modest YOY revenue growth was offset by a respectable population increase over the same period. Total revenue per capita finished at \$576 for the year.

Analysis: Fluctuations in revenues per capita can be attributed to a steadily increasing population and the detrimental effects of the economic downturn during the first few years being examined. Fiscal recovery has been a gradual process, with revenues per capita hitting its lowest point in FY2012, at \$523. However, since then, this indicator has exhibited growth at nearly double the rate of corresponding expenditures.

Expenditures per Capita

Description: This indicator assumes that changes in *per capita* expenditures reflect fluctuations in the population and compares changes to the rate of inflation. The graph compares nominal (current dollar) and real (constant dollar) data.



Commentary: The graph illustrates that between FY2007 and FY2016, actual expenditures per capita in constant dollars decreased by 16.1%. In current dollars, expenditures *per capita* have increased slowly since FY2012, totaling \$1,259 for FY2016.

Analysis: The graph illustrates that in current dollars, Metro's expenditures per capita have grown steadily since FY2012, but in a fiscally responsible manner relative to revenue growth.

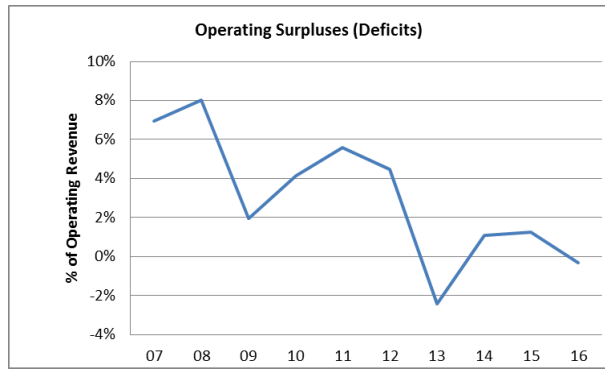
The noticeable high in expenditures per capita in current dollars for 2007 is the result of a status quo Davidson County population and the property tax increase implemented in FY2006. The increase in FY2007 is the result of the restoration of selected expenses following expenditure cuts in FY2005 and the increased availability of revenues from the property tax rate increase. The same underlying source is responsible for the upward trend in both indicators that began FY2013.

Operating Deficits

Description: An operating deficit occurs when current expenditures exceed current revenues. This does not necessarily mean that the budget will be out of balance,

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since reserves from prior years may be used to cover the difference. However, credit rating firms regard a current-year operating deficit as a minor warning signal. Two consecutive years of such deficits indicate that current revenues are not supporting current expenditures and require more attention.

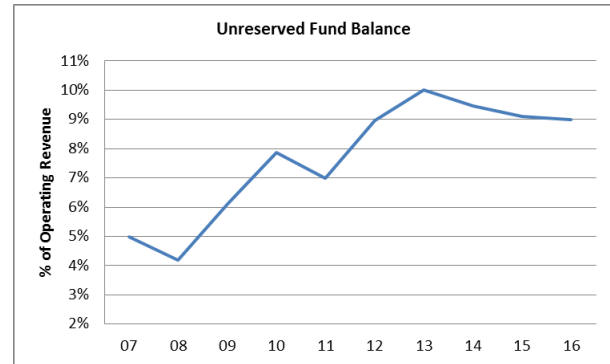


Commentary: Two or more consecutive years of operating fund deficits present a “red flag” with respect to the financial health of Metro Government. While there is some noticeable variability over the last ten years, only two resulted in operational deficits of 2.4% and 0.3%; these finishes occurred in FY2013 and FY2016, respectively. These minimal deficits can be attributed to the planned use of fund balances to balance the operating budget, which have remained exceptionally strong over the last five years. Also of note over the period is that although there has been a gradual decline in the amount of year-end surplus, six of the ten years managed a year over year increase.

Analysis: The Great Recession of 2007 through 2009 resulted in marked declines in net operating revenue for Metro and resulted in the decision to use fund balance dollars to maintain levels of service. Revenue did not begin to stabilize and reach prerecession levels until FY2012, driven primarily by surges in property and sales taxes in the years to follow. This strong growth, the first since FY2006’s increase, led to fewer departments requesting the use of fund balance to maintain current service levels.

Fund Balances

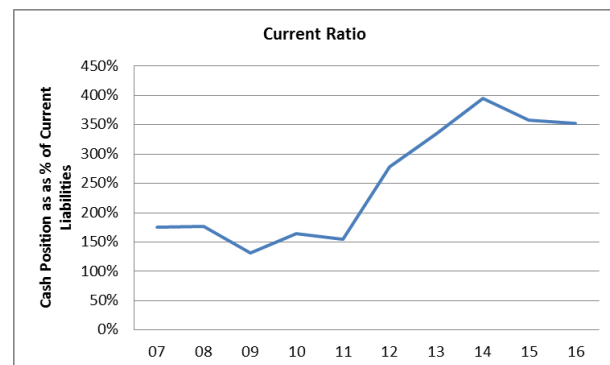
Description: Fund balances can be thought of as reserves. Since some fund balances may be designated for specific projects, it is necessary to differentiate between reserved and unreserved fund balance. Unreserved fund balance is the indicator in this case. Unreserved fund balances enable a government to meet future emergencies. A warning sign occurs when unreserved fund balances decline as a percentage of net operating revenues. This may show an inability to fund emergencies.



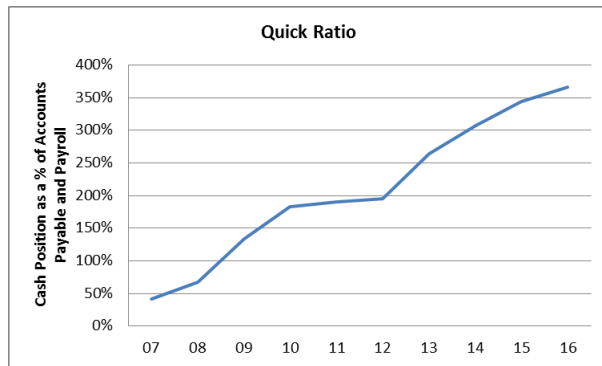
Commentary: Fund balance as a percentage of operating revenue has increased by 80.8% since 2007, totaling over \$84.0M for FY2016, 9.0% of net operating revenues. At no time in the period of analysis has the unreserved fund balance dropped below the 5% threshold, established as part of Metro’s financial management policy with respect to its three tax-supported operating funds. An increase in property tax rates in FY2013, which essentially remained flat following the reappraisal done that same year, caused the unreserved fund balance to increase slightly as a percentage of operating revenue. Since then, despite a gradual decrease, fund balance has averaged a healthy 9.4%.

Liquidity

Description: Liquidity measures a government’s ability to pay its short-term obligations. Insufficient liquidity will make a government insolvent. In these graphs, liquidity is determined by taking current assets and dividing by current liabilities – a measure known in financial analysis as the current ratio and depicted in the graph below. The quick ratio, shown in the second graph below, takes this a step further by taking the most liquid of assets and dividing them by current liabilities. In this case, it is determined by dividing cash and cash equivalents by accounts payable and accrued payroll.



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Commentary: Over the time period of analysis, liquidity has ranged from a low of 131.6% in FY2009 to a high of 395.4% in FY2014, settling at 352.5% last year.

A positive quick ratio, particularly in more recent years, indicates that Metro has had adequate cash reserves for immediate unexpected needs. The trend illustrated above shows an increase over all ten years, with growth only slowing slightly from FY2010 to FY2012. Metro's ability to acquire cash while minimizing increases in short-term obligations is responsible for this.

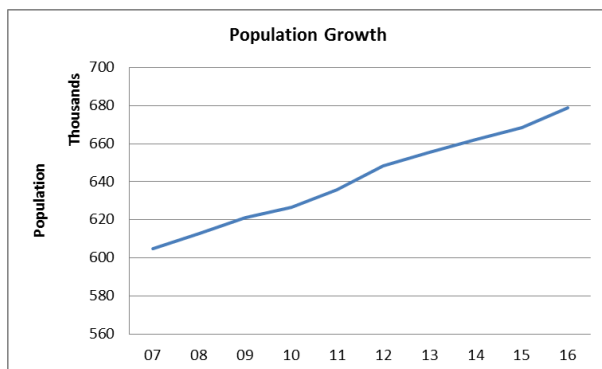
Analysis: Credit rating firms consider liquidity of less than 100% to be a negative factor, which has not occurred over the time period. A positive liquidity position indicates that Metro is not overextended in its financial obligations with current liquidity at more than 3.5 times that recommended level.

Demographic Trends

Municipal fiscal health is related to citizen needs and available resources that are often reflected in economic and demographic indicators.

A greater variety of current demographic information is presented in Appendix 4, "About Nashville."

Population: Population growth has a significant impact on Metro's ability to generate and capture revenue as well as the cost to provide services. The population of Davidson County has increased steadily over the past decade, from 605,031 in 2007 to 678,889 in 2016, an increase of 12.2%.



Unemployment: Over the past decade, Davidson County has maintained low unemployment rates that are parallel to, but lower than, national and state-wide figures. The county's unemployment rate during the last decade has ranged from a low of 3.8% in 2016 to a high of 8.9% in 2010, compared with a range of 4.8% to 9.8% for the state and 4.9% to 9.6% nationally during the same periods.

Unemployment rates at the local, state, and national level have declined steadily since 2014, following consistently high levels as a result of the global fiscal economic crisis took hold between 2009 and 2010. Active fiscal policy on the macroeconomic level by the Federal Reserve and decisive action by the U.S. government resulted in a stabilization of unemployment rates in the last few years of the analysis. The average unemployment rate for Davidson County in 2016 was 3.8%, down from 5.1% in 2015.

Davidson County's steady economic base is likely to continue to be healthy due to its economic diversification and higher-than-average concentration of jobs in education, health care, and professional and technical services. These industries are prominent on the national level and are projected to experience high growth rates over the next decade and beyond.

